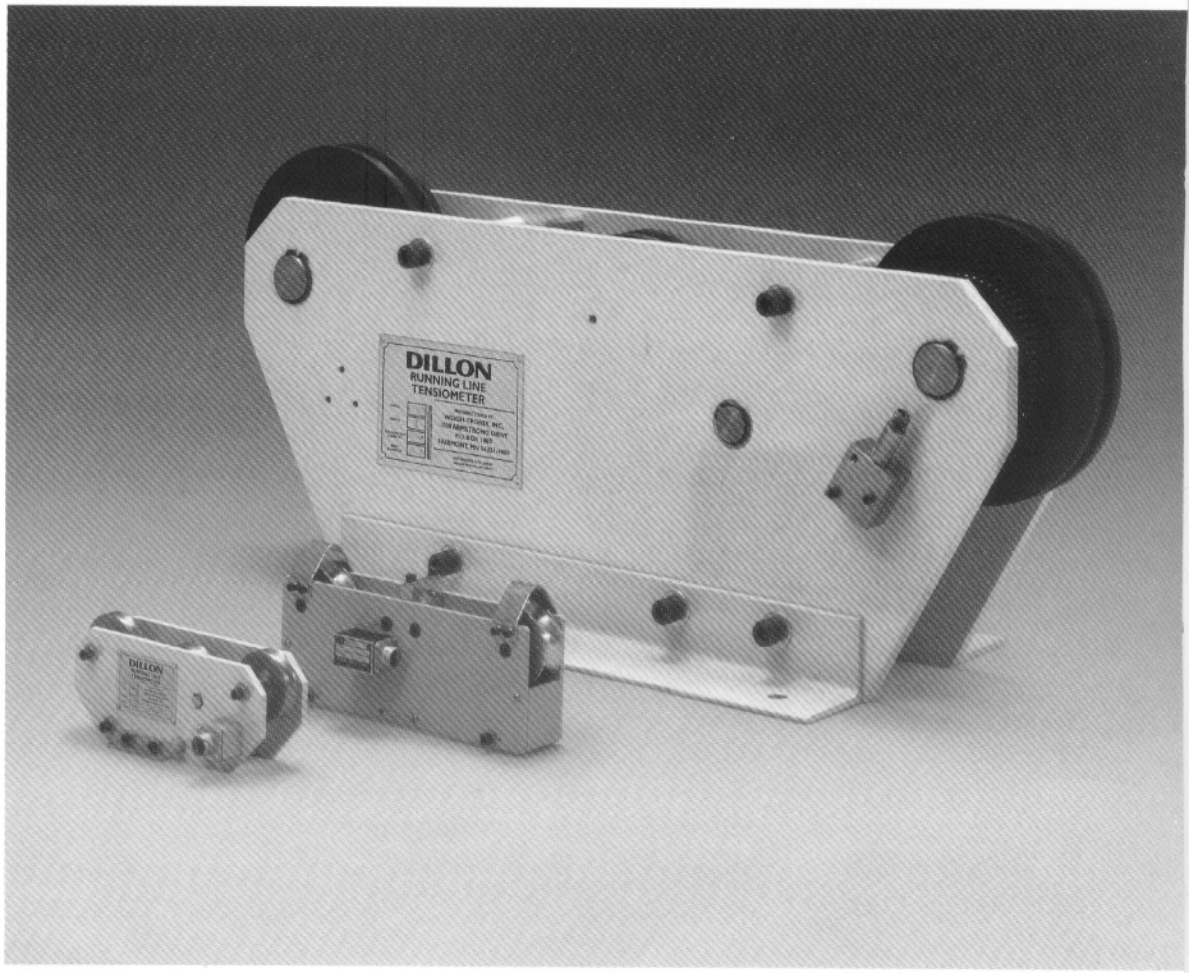
DILLON®

Tensiometers

Dillon Tensiometers:

- Simple, reliable designs
- Continually monitors cable tension
- Ensure cable integrity during installation
- Prevent stress and breaking cables
- Speed and distance indicators
- Capacity ranges 20 lb - 100,000 lb



Measuring Cable Tension

Monitor cable tension, speed and distance. Send data to a printer or computer. Control automated functions – with a Dillon electronic tensiometer.

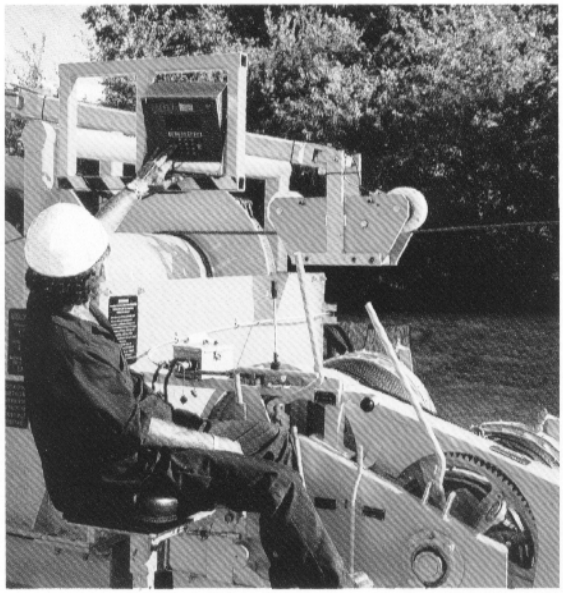
Wide variety of uses

Designed to monitor tension loads on wire, rope, or cable, the Dillon tensiometer has been used in construction, by utility companies, in oil fields and in manufacturing plants.

One of it's popular uses is in the stringing of underground cable. It continually monitors cable tension, allowing even sensitive fiber optic cable to be drawn for miles through underground conduit without being damaged or broken.

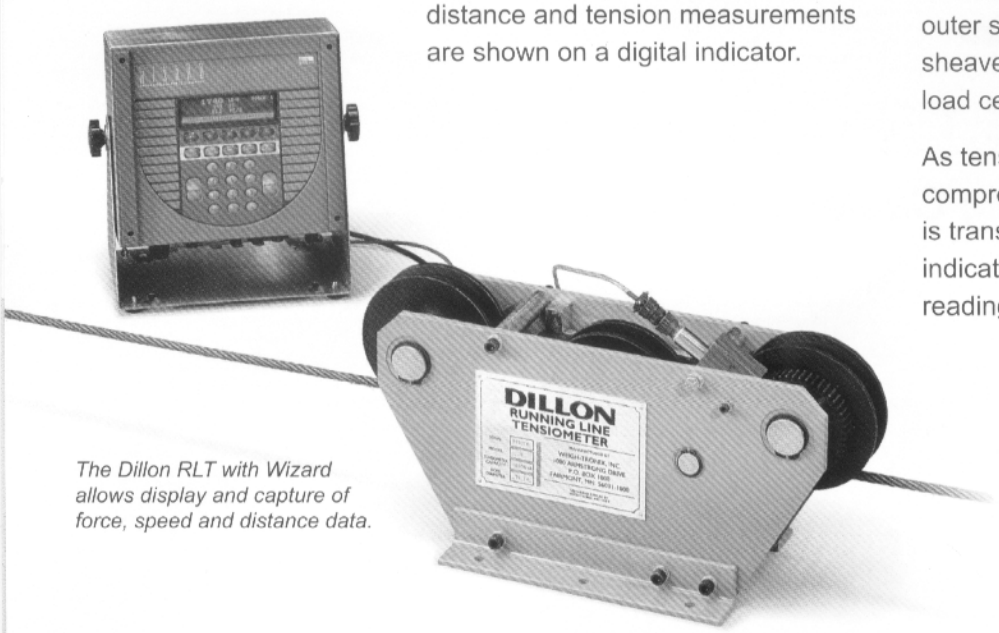
Cable manufacturers use this instrument to control tension as the cable is wound onto spools. Tensiometers are also used in manufacturing settings to monitor cable in overhead lifting applications.

Tensiometers are put to use on drilling rigs to measure drill bit pressure in the oil industry. Textile companies employ tensiometers to insure thread and rope are spooled with the correct tension.



The Dillon RLT Running Line Tensiometer

For measuring tension on running wire cable, Dillon offers the Running Line Tensiometer (RLT). The RLT isavailable in eleven capacities from 20 lb. to 40,000 lbs. The overload rating of every RLT is two times its capacity. Speed, distance and tension measurements are shown on a digital indicator.



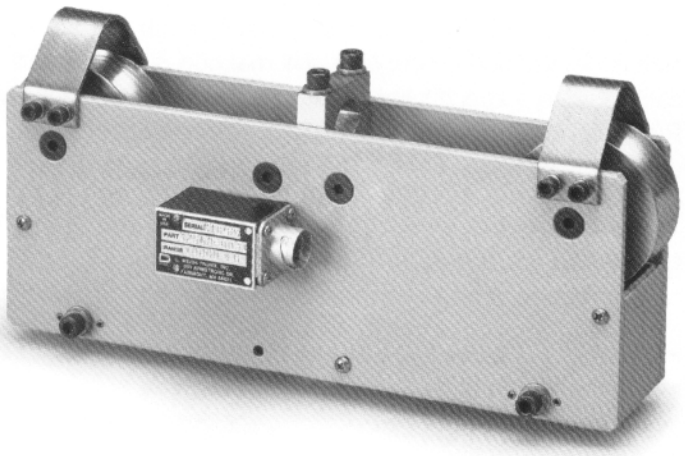
The Dillon RLT with Wizard allows display and capture of force, speed and distance data.

Design of the RLT is deceptively simple. It employs three precision engineered roller bearing sheaves mounted in a rigid frame. The line to be monitored is threaded under the outer sheaves and over the center, pivoted sheave which rests against a Dillon electronic load cell. *See photo at right.*

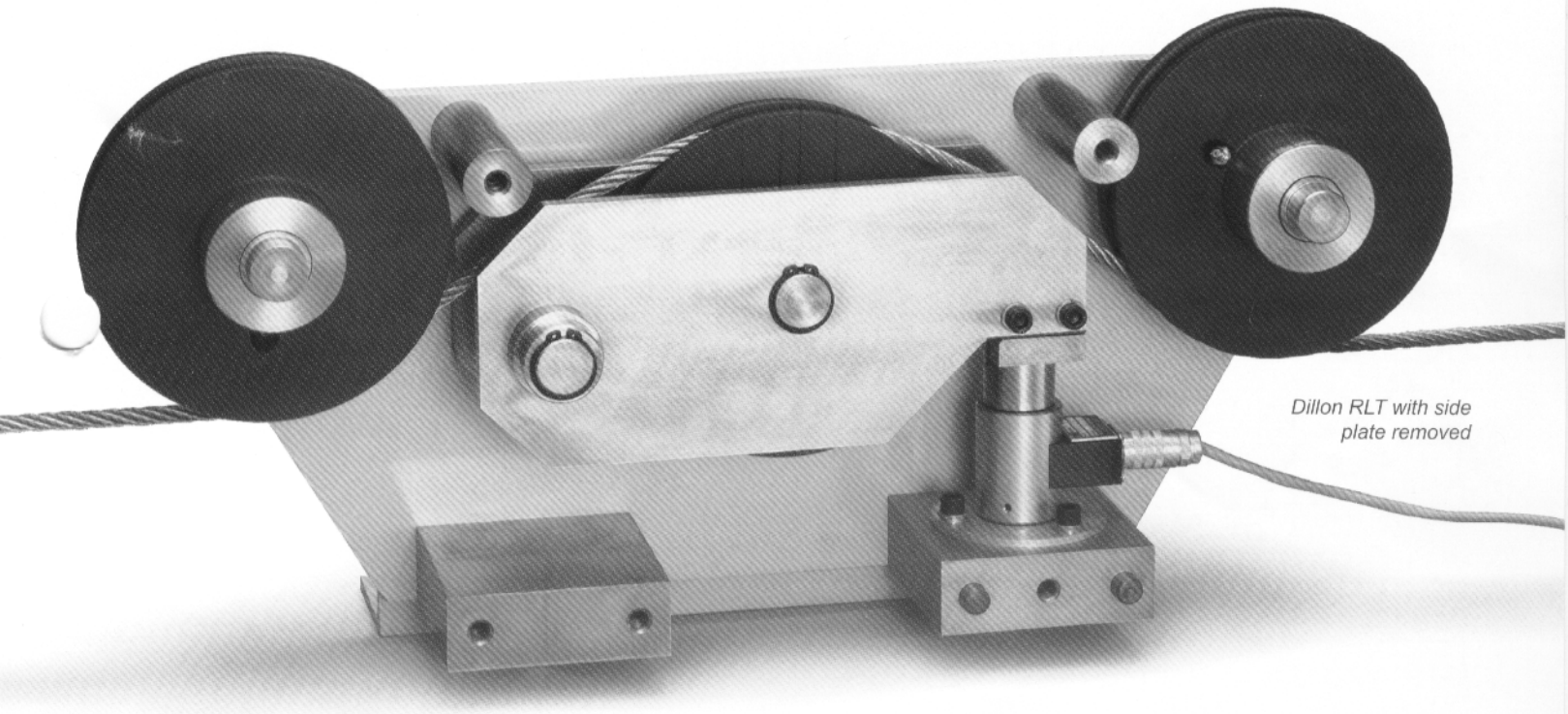
As tension increases, the center sheave compresses against the load cell. This force is transmitted as an electrical signal to the indicator where it is displayed as a direct reading of line tension.

The Dillon CLT Clamp Line Tensiometer

The Model CLT clamp line tensiometer is offered in four capacities from 10,000 to 100,000 lbs, with overload ratings of two times capacity. Its clamp-on design permits it to be easily installed at any convenient point on a non-moving line in a matter of minutes. The CLT utilizes two roller bearing outer sheaves and a fixed center clamping point attached to a Dillon load cell. The rope load applies a tension force to the load cell.



Dillon Clamp Line Tensiometer (CLT)



Dillon RLT with side plate removed

Complete the system with a Digital Display or Wizard Controller

A tensiometer system is made up of a tensiometer paired with a digital load indicator. The tensiometer load cell signal is displayed as a direct reading of line tension in pounds or kilograms. This same signal can be fed to a remote display, printer, or computer and can be used to automate control functions at predetermined set points. The Wizard Controller also monitors speed and distance.

Dillon FI-127 digital display

The right size for every application

A wide variety of sheave or pulley sizes (width and diameter) are available on both the RLT and CLT. Correct pulley size is determined by the size and makeup of the rope to be monitored by the tensiometer. Each tensiometer is calibrated to a specific line size matched to the correct pulley size, when coupled with Dillon instrumentation. Running Line Tensiometers through 1,000 lb capacity are equipped with steel pulleys. Capacities of 4,000 lbs and over are supplied with Nylatron pulleys as standard. Steel pulleys can be supplied on a special basis.

Model RLT – Running Line Tensiometer

Part number	Capacity lb (kg)	Nominal L x W inches (cm)	Nominal pulley dia. inches (cm)	Rope dia. inches min. – max.	Cable speed ft/sec	% FS repeatability
31991-20	20 (9)	9 x 4 (22.9 x 10.2)	2 (5.1)	1/8 – 1/4	20	0.5
31991-50	50 (20)	9 x 4 (22.9 x 10.2)	2 (5.1)	1/8 – 1/4	20	0.5
31991-100	100 (45)	9 x 4 (22.9 x 10.2)	2 (5.1)	1/8 – 1/4	20	0.5
31991-200	200 (90)	9 x 4 (22.9 x 10.2)	2 (5.1)	1/8 – 1/4	20	0.5
31991-500	500 (225)	9 x 4 (22.9 x 10.2)	2 (5.1)	1/8 – 1/4	20	0.5
31991-1K	1,000 (450)	9 x 4 (22.9 x 10.2)	2 (5.1)	1/8 – 1/4	20	0.5
32275-4K	4,000 (1800)	22 x 11 (55.9 x 27.9)	5 (12.7)	3/16 – 7/8	50	0.5
32275-6K	6,000 (2700)	22 x 11 (55.9 x 27.9)	5 (12.7)	1/4 – 7/8	50	0.5
32295-10K	10,000 (4500)	31 x 14 (78.7 x 35.6)	8 (20.3)	3/8 – 7/8	80	0.5
32296-20K	20,000 (9000)	31 x 14 (78.7 x 35.6)	8 (20.3)	3/8 – 7/8	80	0.5
31951-40K	40,000 (18000)	41 x 17 (104.1 x 43.2)	10 (25.4)	1/2 – 1 1/8	100	0.5

Model CLT – Clamp Line Tensiometer

Part number	Capacity lb (kg)	Nominal L x W inches (cm)	Nominal pulley dia. inches (cm)	Rope dia. inches min. – max.	Cable speed ft/sec	% FS repeatability
32568	10,000 (4500)	12 x 6 (30.5 x 15.2)	2 1/2 (6.4)	1/2 – 7/8	—	1.0
27621	20,000 (9000)	16 x 8 (40.6 x 20.3)	3 (7.6)	3/4 – 1 1/4	—	1.0
31646	50,000 (22000)	17 x 6 (43.2 x 15.2)	4 (10.2)	3/4 – 1 3/4	—	1.0
31990	100,000 (45000)	17 x 6 (43.2 x 15.2)	4 (10.2)	3/4 – 2	—	1.0

Tensiometers are installed on rope in a slackline condition.

Shipping Information

RLT Capacity	Net weight lb (kg)	Shipping weight lb (kg)
20 - 1,000 lb	5 (2.3)	10 (4.6)
4,000 & 6,000 lb	70 (31.8)	75 (34.0)
10,000 & 20,000 lb	145 (65.8)	185 (83.9)*
40,000 lb	237 (108)	280 (127)*
100,000 lb	820 (372)	860 (390)*

CLT Capacity	Net weight lb (kg)	Shipping weight lb (kg)
10,000 lb	7 (3.2)	12 (5.5)
20,000 lb	26 (11.8)	30 (13.6)
50,000 lb	40 (18.2)	45 (20.4)
100,000 lb	100 (45.4)	140 (63.5)

** These shipping weights reflect the use of a 40 lb pallet.*

Itin Scale Co., Inc.
431 Avenue U
Brooklyn, NY 11223
PHONE: 718-336-5900
FAX: 718-627-1313
EMAIL: sales@itinscales.com
www.itinscales.com